



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,624	02/25/2005	Harutun Manoukian	3687-99	5280
23117	7590	02/06/2008	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			YAN, REN LUO	
			ART UNIT	PAPER NUMBER
			2854	
			MAIL DATE	DELIVERY MODE
			02/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,624	MANOUKIAN, HARUTIUN	
	Examiner	Art Unit	
	Ren L. Yan	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 November 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18,27 and 28 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Dubuit(6,397,740).

The patent to Dubuit teaches a machine for applying substances to a substrate as claimed including a plurality of application stations 14 arranged along a common production line, at least one unit for general control of the machine and a unit 11 to sequentially transfer the substrate from one of the stations to another of the stations, at least one of the stations 14 being convertible from a screen printing mode to a digital printing mode, or vice versa shown in Figs. 1, 4a and 4b when screen printer 14 is retracted and inkjet printer 15 is substituted to affect the printing mode change.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 17, 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit in view of Rodi(6,019,046).

With respect to claims 1 and 27, the patent to Dubuit teaches the broadly recited station as shown in Figs. 1-4b where screen printing unit 14 and digital printing unit 15 are alternately

disposed for applying one or more substances to a substrate, of the type comprising at least one mobile printing bridge(support for the screen printing unit 14 or the support for the digital printing unit 15), characterized in that it comprises the inherent means to install and means to control, the mobile printing bridge so as to selectively carry out the screen printing mode with the screen printing unit 14 or the digital printing mode with the digital printing unit 15.

However, Dubuit does not teach to transform or convert the same mobile printing bridge from a screen printing station to a digital printing station, or vice versa as recited. The patent to Rodi teaches the very concept of providing a printing machine with replaceable units to allow different methods of printing to take place. Specifically, Rodi teaches the use of various types of printing units 4a-4e(inkjet, electrophotographic, offset, gravure printing types) so constructed so as to be removable from the printing machine frame and to be exchangeable with one another and all of the units are modular in design having identical mounting parts for mounting to the printing frame and identical standard plug connectors for a power supply and a data exchange with a electronic data processor. See the entire Rodi parent for details. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the different printing units of Dubuit with identical mounting parts and the printing bridge the capability to support the various types of printing units, screen printing or digital printing, to facilitate easy conversion from one type of printing mode to another for the advantage as taught by Rodi that the various printing units are replaceable and commonly operable, respectively, without any manual interventions or adjustments due to the fact they have identical mounting parts and are controlled by an electronic data processor through the use of standard plug connectors.

Regarding claim 2, Dubuit teaches in cl. 2, lines 62-67 and cl. 3, lines 28-40 wherein said means to install said assemblies for screen printing or digital application of one or more substances comprise at least one pair of supporting elements to mount on said mobile printing bridge at least one doctor/doctor unit or at least one doctor/scraping unit of an assembly for applying one or more substances in screen printing mode, and Fig. 2 to mount at least a bar 27 to support a plurality of heads 28 for applying one or more substances in digital mode.

Regarding claim 3, the combination of Dubuit and Rodi teaches the inherent structure necessary to enable alternate application of screen printing or digital printing including the means to alternatively control said assemblies for screen printing or digital application of one or more substances comprise a programmable control device to perform at least one of the following functions: data exchange under the form of signals with at least one general control unit associated with a machine to apply substances in which said station is installed; movement of said mobile printing bridge; movement of one or more mobile parts during operation in screen printing mode, and halting of said one or more mobile members during operation in digital mode; and control of the printing heads during operation in digital mode.

Regarding claims 4 and 6, Dubuit teaches the use of one or more heads 28 for ink jet type printing.

Regarding claim 5, Dubuit teaches that said one or more heads for ink jet type printing are supplied with the same substance, namely ink.

Regarding claim 7, Dubuit teaches at least two of said heads 28 for ink jet type printing are supplied with substances differing from one another, namely different color inks.

Regarding claim 8, Dubuit teaches in Figs. 1-4b a multicolor printing machine for

applying substances to a substrate, of the type comprising a plurality of application stations arranged along a common production line, at least one unit for general control of said machine and means to transfer said substrate from one of said stations to another subsequent of said stations, characterized in that it comprises at least one station for applying one or more substances according to claim 1.

Regarding claim 9, Dubuit teaches in Figs. 2 and 3 wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one printing bridge 27 which is movable in a direction perpendicular to the progress direction of said substrate.

Regarding claim 10, Dubuit teaches in Fig. 1 wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one fixed printing bridge 20 which extends perpendicularly in relation to the progress direction of said substrate.

Regarding claims 11 and 13, Dubuit teaches wherein at least one of said stations is set for digital application of said one or more substances and comprises one or more heads 28 for ink jet type printing.

Regarding claim 12, Dubuit teaches wherein said one or more heads for ink jet type printing are supplied with the same substance, namely ink.

Regarding claim 14, wherein at least two of said heads for ink jet type printing are supplied with substances differing from one another, namely different color inks.

Regarding claim 15, Dubuit teaches in cl. 3, lines 7 and 8 wherein at least one drying station of said substances is provided interposed between at least two of said stations for applying said one or more substance to said substrate.

Regarding claim 17, Dubuit teaches wherein said means for transferring said substrate from one of said stations to another subsequent of said stations comprises gripping units (object support units 13) associated with each of said stations and controlled by said general control unit.

Regarding claim 18, Dubuit teaches wherein at least one of said stations is set for digital application of said one or more substances and at least another of said stations is set for screen printing application of said one or more substances.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit in view of Rodi as applied to claims 1 and 8 above, and further in view of EP 0687560.

Dubuit, as modified by Rodi, teaches all that is claim except that the endless conveyor 11 for transferring the substrate from one station to another is a rotating turret rather than a continuous conveyor belt as recited. EP 0687560 teaches in a multicolor printer the conventionality of using a continuous conveyor belt 2 for transferring the substrate being printed from one printing station to another (printing stations 6-9) in a linear conveying path. See Figs. 1-6 and the abstract in EP 0687560 for example. In view of the teaching of EP 0687560, it would have been obvious to one of ordinary skill in the art to provide the printing machine of Dubuit, as modified by Rodi, with a linear substrate conveying path using a continuous conveyor belt in order to facilitate registration of the print image from one station to another and to ensure print quality.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/
Primary Examiner, Art Unit 2854
Jan. 29, 2008